



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/075,058

02/11/2002

Simon Turner

010108

7484

23696 7590 06/29/2009
QUALCOMM INCORPORATED
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

NGUYEN, HANH N

ART UNIT

PAPER NUMBER

2416

NOTIFICATION DATE

DELIVERY MODE

06/29/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com
kascanla@qualcomm.com
nanm@qualcomm.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/075,058
Filing Date: February 11, 2002
Appellant(s): TURNER, SIMON

Turner
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 3/24/09 appealing from the Office action mailed 12/17/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6937861	VANGHI	08-2005
6269402	LIN et al.	7-2001
6487399	RAJANIEMI et al.	11-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 6, 8-17, 18, 19-23, 24, 26, 27-29, 30 and 31 are rejected under 35 USC 103(a) as being unpatentable over Vanghi (US Pat. 6,937,861 B2) in view of Lin et al. (US pat. 6,269,402 B1).

Art Unit: 2416

In claims 1, 10, 16 and 31, Vanghi discloses a method of conducting wireless data communications (see fig.4) comprising receiving a packet data transmission from a first wireless network (access terminal 14 receives ACK message comprising traffic channel assignment from radio network 22; see col.8, lines 8-15); momentarily suspending communication to the first wireless network (access terminal 14 suspends its reverse connection with the radio network 22 to switch connection IS2000 radio network 28, see col.8, lines 20-25); reconfiguring a receiver from a mode corresponding to communication with the first wireless network to a mode corresponding to communication with a second wireless network (suspends its connection with the radio network 22 to perform idle state processing with radio network 28, see col.8, lines 20-40); monitoring a paging channel of the second wireless network (col.5, lines 30-40; access terminal 14 periodically monitors paging channels transmitted from radio network 28 for incoming call, incoming pages); reconfiguring the receiver from the mode corresponding to communication with the second wireless network to the mode corresponding to communication with the first wireless network (once completing the idle state processing with the radio network 28, access terminal 14 returns to its previous connection to radio network 22, col.8, lines 40-47); and transmitting a resume command to the first wireless network (access terminal 14 resumes communication with access network 12 using previously assigned resource; see col.8, lines 40-47 & col.9, lines 50-55). However, there is not a pause command transmitted to the first wireless network in Vanghi to suspend the communication.

Art Unit: 2416

Lin et al. discloses, in fig.1 & Abstract, a client 102 establishes a first connection with a first bearer network 106. At some time, the first connection is terminated/interrupted, and a second connection is initiated on a second bearer network. The first connection is terminated in response to a suspension request transmitted between network entities (see fig.5, step 512; col.5, lines 55-62) such as between the client 102 and the server 104 (see col.5, lines 15-30). After the interruption has occurred, (at fig.5; step 516, col.6, lines 12-20), the connection may resume by issuing a resume command over the second bearer network. The bearer networks are wireless networks (see heading).

Therefore, it would have been obvious to one skilled in the art to design the access terminal 14 of Vanghi for transmitting the suspend request to the first radio network 22 before momentarily suspending its communication with the radio network 22. The motivation is to avoid the loss of information during the first connection with the first network by storing the previous connection information in the first network.

In claims 17, 19 and 27, Vanghi substantially discloses most of limitations as disclosed in the rejection of claim 1 above. In addition, Vanghi discloses the access terminal 14 is configured with a suspension timer such that the access terminal 14 can keep track of how long its connection with radio network 22 was suspended (a timer configured to send an indication at a time near a start of a paging slot; see col.7, lines 40-50).

In claims 2, 3, 22 and 23, Vanghi discloses, in fig.1, transmitting a pause command to the first wireless network includes transmitting a pause command to a

Art Unit: 2416

packet data serving node (PDSN 24) via the first wireless network (radio network 22), and wherein transmitting a resume command to the first wireless network (radio network 22) includes transmitting a resume command to the packet data serving node (PDSN 24) via the first wireless network; and receiving packet data transmission from packet data serving node (PDSN 24) via the first network (radio network 22).

In claim 11, Vanghi discloses the steps of transmitting a resume command to the first wireless network, wherein said monitoring occurs between said transmitting a pause command and said transmitting a resume command in claim 1 above.

In claim 6, 8, 9, 12, 13, 14, 15, 20, 21, 28 and 29, Vanghi discloses the pause command including null data rate as well as the resume command includes non-null data rate as indicated in claim 1.

In claims 5, Vanghi does not disclose the pause command includes a command to reduce a data rate. Huang et al. discloses that placing the call on hold can significantly reduce the network bandwidth (see col.2, lines 1-5; pause command reduce data rate). Therefore, it would have been obvious to one skilled in the art that the request to stop transmitting IP packets if applied in Vanghi would reduce data rate in the network. The motivation is to save bandwidth and control congestion in the network.

In claim 24, Vanghi discloses the access terminal is further configured and arranged to receive the packet data transmissions (receiving traffic channel assignment; fig.4, col.8, lines 10-15) from the first wireless network over a traffic channel; and wherein, near a start of the paging slot (at some later point in time), a mode of the access terminal is changed from a mode corresponding to the traffic

Art Unit: 2416

channel (suspending traffic channel) to a mode corresponding to the paging channel (to monitor for incoming pages). See col.8, lines 20-27 and col.5, lines 35-42. unit is changed from a mode corresponding to the traffic channel to a mode corresponding to the paging channel. Vanghi does not disclose the access terminal comprising a physical layer control unit configured to receive packet and change from traffic channel to paging channel. An office notice is taken that having a control unit in an access terminal is well-known in the art to control operation of access unit. Therefore, it would have been obvious to comprise a physical layer control unit in an access terminal of Vanghi to receive packet transmission and change from traffic channel to paging channel. The motivation is to provide access terminal capability of receiving incoming communications from one wireless network even while it is active on another wireless network.

In claim 26, as disclosed by Vanghi in claim 24 above, when when the access terminal 14 completes its connection with radio network 28 (paging channel), it resumes communications with radio network 22 (traffic channel) by transmitting on reverse link channel (changing from paging channel to traffic channel). See col.5, lines 52-55.

In claims 18 and 30, with the discussion of the parent claims, interrupt request signal has been disclosed in claims 1, 10, 16 and 31.

Art Unit: 2416

Claim 4, 7 and 25 are rejected under 35 USC 103(a) as being unpatentable over Vanghi (Pat. 6,937,861 B2) in view of Lin et al.(US pat. 6,269,402 B1), and further in view of Rajaniemi et al. (US Pat. 6,487,399 B1).

In claims 4, 7 and 25, Vanghi does not disclose reconfiguring the receiver including changing a frequency of a RF stage. Rajaniemi et al. discloses a multi-mode, dual band mobile terminal 10 (fig.2) communicating with a network 32 (first wireless network) at a GSM1900 carrier (a first mode) at 200KHz (a first frequency) and another network 32' (a second network) at TDMA1900 carrier (a second mode) at 30 KHz (a second frequency). The mobile station 10 tunes its receiver 16 (fig.1) at 200 KHz, and then converts the frequency to 30 KHZ. See Abstract. Therefore, it would have been obvious to one ordinary skilled in the art to use the tuning frequency of Rajaniemi et al. into Vanghi to change the frequency of the access terminal corresponding from a frequency corresponding to IS-856 mode to a frequency corresponding to IS 2000 mode. The motivation is to reduce interference between dual networks.

(10) Response to Argument

Appellant argues, on the Remark, pages 7,8, 9 that the suspension request of Lin et al. pointed by examiner is not equivalent to the claimed "pause command" because the suspension request of Lin et al. permanently terminates the first connection over the first network and is never resumed to the first network.

Art Unit: 2416

Examiner does not agree because referring to Lin et al., fig.5, steps 506, 510, 512, 516, a client after establishing a communication session to a server over bearer network 106 (step 506; col.5, lines 45-50), interrupts the communication session by requesting a suspension to the bearer network 106 (step 512, col.5, lines 55-53 and 15-25). The client later issues a resume command to reconnect the communication session over the same bearer network 106 (see step 516; col.6, lines 15-25).

Examiner believes that the " suspension request" cited by Lin et al. is the same as the claimed "pause command" because the the "suspension request" later reconnects the communication session over the same bearer network 106 by transmitting a resume command.

Appellant further argues, on page 9, since the suspended communication session in Lin et al. has options to be resumed over a different bearer network but with different network connection (parameters); therefore, the suspended communication session of Lin et al. is resumed over a new network connection of the different network.

Examiner does not agree because the claimed invention only requires reconfiguring a receiver to establish data transmission from the first wireless network to a second wireless network by transmitting a pause command and vice versa back to the first network by transmitting a resume command. There is no indication that the data transmission must be resumed over a network connection of the same bearer network.

Art Unit: 2416

Appellant further argues on page 9 that Lin et al. can not teach transmitting a pause command to the first wireless network in the manner of the claimed invention.

Examiner does not agree because Lin et al. in fig.5, step 512, col.5, lines 55-65, the client during a communication session with server over bearer network interrupts its session by transmitting a suspension request to the server.

Appellant further argues on pages 10-12 that the combination of Vanghi and Lin et al. references is improper.

Examiner does not agree because Vanghi discloses a method of conducting wireless data communications (see fig.4) comprising receiving a packet data transmission from a first wireless network (access terminal 14 receives ACK message comprising traffic channel assignment from radio network 22; see col.8, lines 8-15); momentarily suspending communication to the first wireless network (access terminal 14 suspends its reverse connection with the radio network 22 to switch connection IS2000 radio network 28, see col.8, lines 20-25); reconfiguring a receiver from a mode corresponding to communication with the first wireless network to a mode corresponding to communication with a second wireless network (suspends its connection with the radio network 22 to perform idle state processing with radio network 28, see col.8, lines 20-40); monitoring a paging channel of the second wireless network (col.5, lines 30-40; access terminal 14 periodically monitors paging channels transmitted from radio network 28 for incoming call, incoming pages); reconfiguring the receiver from the mode corresponding to communication with the second wireless network to the mode

Art Unit: 2416

corresponding to communication with the first wireless network (once completing the idle state processing with the radio network 28, access terminal 14 returns to its previous connection to radio network 22, col.8, lines 40-47); and transmitting a resume command to the first wireless network (access terminal 14 resumes communication with access network 12 using previously assigned resource; see col.8, lines 40-47 & col.9, lines 50-55). However, there is not a pause command transmitted to the first wireless network in Vanghi to suspend the communication.

Refer to Lin et al., fig.5, steps 506, 510, 512, 516, a client after establishing a communication session to a server over bearer network 106 (step 506; col.5, lines 45-50), interrupts the communication session by requesting a suspension to the bearer network 106 (step 512, col.5, lines 55-53 and 15-25). The client later issues a resume command to reconnect the communication session over the same bearer network 106 (see step 516; col.6, lines 15-25).

Examiner believes that the "suspension request" cited by Lin et al. is the same as the claimed "pause command" because the the "suspension request" later reconnects the communication session over the same bearer network 106 by transmitting a resume command.

Therefore, it would have been obvious to one skilled in the art to combine the teaching of Lin et al. with Vanghi to transmit the suspend request to the first network. The motivation is to configure data transmission from a first network to a second network by transmitting a suspension request the first network. Once the data transmission with the

Art Unit: 2416

second network completes, a resume command may be issued to reconnect the data transmission with the first network.

Appellant further argues on page 12 that the rejection of claims 4, 7, 25 in view of Vanghi, Lin et al. and rajaniemi is improper. Since appellant does not provide reasons why the rejections of claims 4, 7., 25 is improper, therefore, examiner maintains the rejection of claims 4, 7, 25.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Hanh Nguyen/

Primary Examiner, Art Unit 2416

Conferees:

/KWANG B. YAO/

Supervisory Patent Examiner, Art Unit 2416

/Chirag G Shah/

Supervisory Patent Examiner, Art Unit 2419